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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/370,981	08/10/1999	YUICHIRO OGAWA	104018	8747

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ALEXANDRIA, VA 22320

EXAMINER

FISCHER, JUSTIN R

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 01/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/370,981

Applicant(s)

OGAWA, YUICHIRO

Examiner

Justin R Fischer

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 4 and 6-9 is/are pending in the application.
- 4a) Of the above claim(s) 6-8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 9 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shibata (JP 6-191238, of record) in view of Ueyoko (US 5,885,387, of record). Shibata and Ueyoko are applied in the same manner as set forth in the Non Final Rejection mailed on June 22, 2004 (Paragraph 5).

As best depicted in Figures 1 and 2, Shibata is directed to a pneumatic, radial tire construction for passenger cars having a pair of rectangular bead cores 3A, 3B in each bead portion such that they are adjacent to each other in the widthwise direction. The reference also depicts a carcass structure 4 having a roundtrip return portion that (a) extends from an inside of the tire toward an outside of the tire, (b) is located through a side face of the axially innermost bead core, (c) extends from an inside of the tire toward an outside thereof, and (d) covers at least a radially innermost steel wire arrangement of said axially innermost bead core. However, the reference, in describing the carcass structure, is completely silent with respect to the use of a single, continuous cord. Ueyoko, on the other hand, describes a radial, pneumatic tire for passenger cars in which an endless carcass cord ply is employed. The use of such a carcass structure increases bead durability and contributes to the reduction of tire weight, both of which

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are desirable in all tires, wherein only the expected results would be achieved in modifying the carcass structure of Shibata in view of Ueyoko. As such, it would have been obvious to one of ordinary skill in the art at the time of the invention to form the carcass structure of Shibata from a single, continuous cord structure, in view of Ueyoko, as further detailed below.

With respect to claim 2, Figures 1 and 2 of Shibata depict the return end of the roundtrip return portion as being sandwiched between the respective bead cores. Regarding claim 9, applicant requires that the roundtrip return portion of the carcass ply cord have multiple, overlapping terminal parts. Ueyoko, in describing this unique carcass design, discloses the use of a multiplicity of folding points, which is analogous to "multiple, overlapping terminal parts". The use of such a carcass design further enhances the bead durability, while promoting the weight reduction of the tire. The reference describes this turnup structure in Column 2, Line 10, saying the carcass cord ply is provided with a multiplicity of folding points arranged in the tire's circumferential direction at both outer ends of the cord ply. The turnup structure is additionally depicted in Figure 3.

Allowable Subject Matter

3. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. In particular, the prior art references of record failed to suggest, disclose, or teach a pneumatic tire construction having a continuous carcass cord structure in which the roundtrip return portion extends between a pair of bead

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cores and the terminal end of a roundtrip return portion extends along the outer side face of an axially outward bead core.

Response to Arguments

4. Applicant's arguments filed October 22, 2004 have been fully considered but they are not fully persuasive. In regards to Kakigi (JP 05-016620), it is agreed that the roundtrip return portion does not extend between the respective bead cores in at least one bead region and as such, the rejection has been withdrawn. However, the rejection of claims 1, 2, and 9 with Shibata in view of Ueyoko is maintained.

Applicant contends that Shibata does not teach or suggest the inclusion of a continuous carcass cord and furthermore. It is agreed that Shibata does not anticipate the tire construction of claim 1; however, in view of Ueyoko, one of ordinary skill in the art at the time of the invention would have found it obvious to form the carcass of Shibata as a continuous cord assembly or structure.

Applicant further argues that Ueyoko (corresponds to JP 9-155991) suffers deficiencies in that the bead portion is not sufficiently stiff and hence pulling out phenomenon exists. This recognition in the original disclosure (Page 3, Lines 3-7), though, appears to be related to the use of only a single bead core and thus, one of ordinary skill in the art at the time of the invention would not expect the above noted problems to be existent in the multiple bead tire structure of Shibata in view of Ueyoko.

In regards to applicant's statement concerning the common assignment between the relevant references, it is not required, and for that matter it is not suggested, that every reference disclose every possible combination. Thus, the fact that a patent does

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not suggest an embodiment previously disclosed in a commonly assigned patent does not eliminate a combination of the respective patents.

Lastly, Ueyoko specifically suggests that the use of a continuous carcass cord construction, as opposed to a ply having a plurality of reinforcing elements, provides increased bead durability and thus contributes to the reduction of tire weight. It is believed that such a construction would provide the above noted benefits in a bead region formed of a single bead core or a double bead core arrangement.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

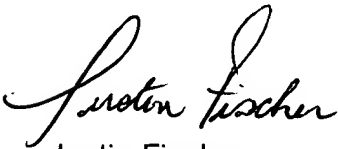
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Justin R Fischer** whose telephone number is **(571) 272-1215**. The examiner can normally be reached on M-F (7:30-4:00).

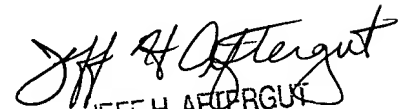
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Justin Fischer

January 3, 2005


JEFF H. AFTERGUT
PRIMARY EXAMINER
GROUP 1300